

# Supporting Information

## Electrochemical long period fiber grating sensing for electroactive species

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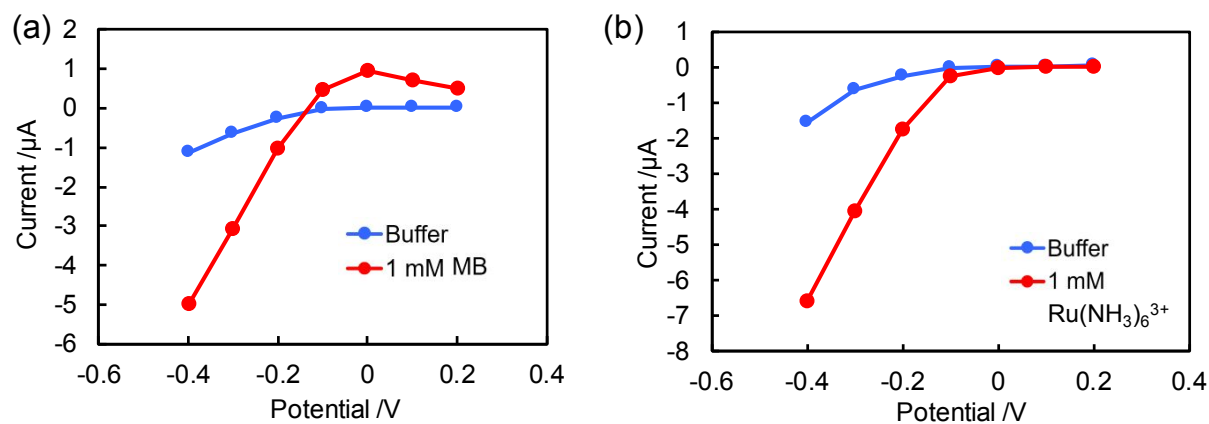
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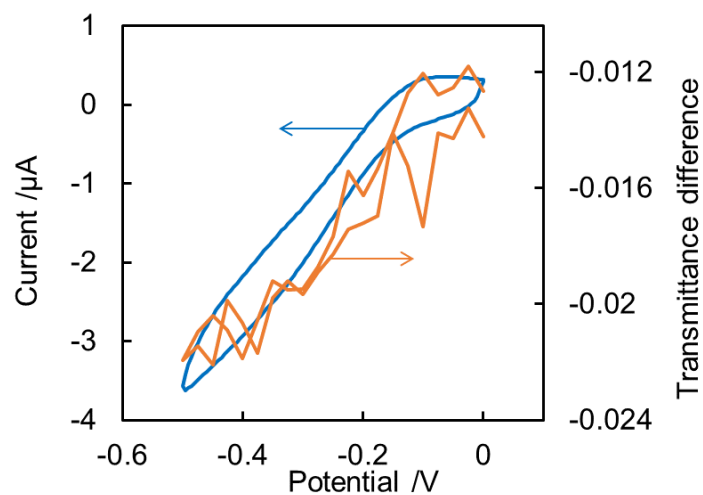
Figure S1. Current values of methylene blue and  $\text{Ru}(\text{NH}_3)_6^{3+}$  obtained using the ITO-coated LPFG sensor as a function of applied potential for 200 s.

Figure S2. Cyclic voltammogram of 1 mM  $\text{Ru}(\text{NH}_3)_6^{3+}$  obtained by the ITO coated on LPFG and difference in the transmittance value at 1550 nm with and without  $\text{Ru}(\text{NH}_3)_6^{3+}$ .

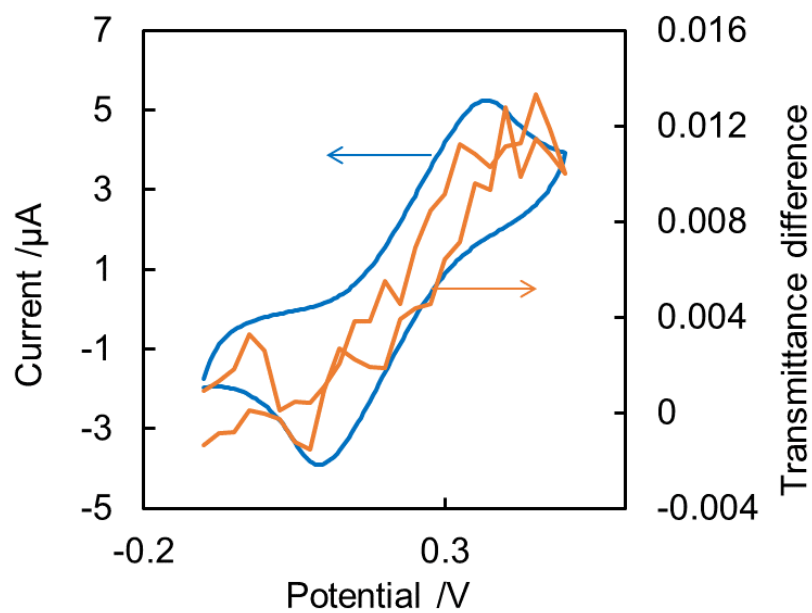
Figure S3. Cyclic voltammogram of 0.1 mM ferrocyanide obtained by ITO coated on LPFG and the difference in the transmittance value at 1542 nm with and without ferrocyanide.



**Figure S1.** Current values of methylene blue (a) and  $\text{Ru}(\text{NH}_3)_6^{3+}$  (b) obtained using the ITO-coated LPFG sensor as a function of applied potential for 200 s.



**Figure S2.** Cyclic voltammogram of 1 mM  $\text{Ru}(\text{NH}_3)_6^{3+}$  obtained by the ITO coated on LPFG and difference in the transmittance value at 1550 nm with and without  $\text{Ru}(\text{NH}_3)_6^{3+}$ .



**Figure S3.** Cyclic voltammogram of 0.1 mM ferrocyanide obtained by ITO coated on LPFG and the difference in the transmittance value at 1542 nm with and without ferrocyanide.